



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION

Meeting Minutes for December 13, 2001

Members in Attendance:

Mark P. Smith	Designee, EOE
Marilyn Contreas	Designee, DHCD
Peter Webber	Commissioner, DEM
Cynthia Giles	Designee, DEP
Mark Tisa	Designee, DFWELE
Joe Pelczarski	Designee, CZM (non-voting)
Richard Butler	Public Member
Gary Clayton	Public Member
David Rich	Public Member
Frank Veale	Public Member
Bob Zimmerman	Public Member

Others in Attendance:

Richard Thibedeau	DEM
Mike Gildesgame	DEM
Linda Marler	DEM
Michele Drury	DEM
Lorraine Downey	MWRA
Vicki Gartland	DEM
Francis G. Lewis	Town of Rockport
Nicola Barletta	Town of Rockport
Russ Cohen	DFWELE
Eileen Simonson	WSCAC
Kelly J. Whalen	URS Corp
Peter Weiskel	USGS
Lawrence Gil	EOEA
Pine DuBois	JRWA
Ming Yuan Pan	DEP
John Reinhardt	DEP

Agenda Item #1: Executive Director's Report

- Smith stated that Murphy spoke at the Irrigation Installers of New England meeting. She spoke about our overall watershed priorities and our new landscape and lawn watering policy. They have concerns about how this might affect them, but they think the policy is fair. We encouraged them to put their comments in writing. We will be reposting in MEPA to let people know that the document is out for public comment.

- We also met with the environmental committee of the Mass. Municipal Association. We spoke about our lawn policy. They are concerned about our recommendation concerning banning automatic sprinklers. They not sure if we have this authority. We also discussed the Lakes and Ponds program and we will be meeting with them about the Water Assets project.
- There is a new brochure for Army Corps programs. We hope that this will generate more applications to the programs. Proposals for this year's round are due February 12th. The brochure has two parts: a letter from Secretary Durand encouraging applications and a brochure outlining the application process and procedures. Gildesgame received a letter from The ACOE summarizing past projects funded by the Corps.
- We have just received a USGS report, put together in cooperation with DEP Office of Watershed Management, on the statewide water quality network for MA.
- There is a conference tomorrow hosted by Mass Insight on infrastructure issues, including long-term water supplies
- In November, we hit the drought advisory stage, which triggers meetings of the Drought Management Task Force. On cue, it started to rain.

Marler provided an update on the hydrologic conditions:

- For perspective on the drought situation, in March, we had a tremendous snow pack. On top of that, we got heavy rains, resulting in flooding. In June, Tropical Storm Allison came through, dropping 10-11 inches of rain. This drought is just a problem of the last few months. We've only had a problem since mid-August. This is a short term condition that could be reversed with a few good storms. This is not nearly the same as the drought of record from the 1960's or the moderate drought of the 1980's. Those both went on for years.
- In terms of the drought plan: the percent of normals for November, based on incomplete data, are rainfall at 27%, statewide. The west has done better than east. October and November had poor rainfall. The three month total has not been that great, either. The 6-12 month cumulative does not look bad. This is just a 2-3 month problem in the eastern part of the state, but if December doesn't improve, we could have problems. To emphasize the recent nature of this problem, when we look at August, September, October and November streamflows, there are normal trends for August, but streamflow is trending down to November. Long-term trends show us in a condition similar to September 1999.
- As of this Tuesday, we have had low percentiles for streamflows.
- October and November show declining groundwater levels. Cape Cod groundwater levels have been below normal since June 1999. USGS posted its own drought advisory on its website, indicating the lowest groundwater levels ever.
- Smaller reservoirs are showing more fluctuation and are as low as we've seen them since we started this program two years ago. This is quite unusual for December. Larger reservoirs seem to be doing fine. They are lower than normal but they still have plenty of capacity.
- The Palmer Drought index indicates that we are near normal, as it accounts for the June rainfall. The Crop Moisture Index shows no problem here at this time. USGS puts us in a moderate drought.

- Predictions are for December to start out dry and warm. We are behind on precipitation half way through month. Even if we have normal precipitation for rest of the month, some of the regions might jump to drought watch (because we are losing June when we calculate cumulative levels).
- Marler and Gartland attended a winter weather conference on December 1st. A winter weather forecast was given using a snow index. This winter they are predicting that we will get more than normal snowfall.

Smith stated that droughts don't usually start with dry summers, they start with dry winters. So if we are going to have heavier snowfall than usual, we should hope that we start getting it soon. Simonson stated that some communities have requested that MWRA provide emergency water to them this winter due to low ground water levels. Smith stated that the agencies were asked to endorse the drought management plan.

Gartland summarized the drought management plan. Many indices were used in the plan. We have just completed defining and mapping the drought regions. Gartland went on to explain the drought levels and how they relate to the indices used in the drought plan. She also explained how the agencies would respond during different drought levels.

Agenda Item #2: Vote on Rockport's Request for a Determination of Insignificance Under the Interbasin Transfer Act

Smith reminded the Commission that there was a presentation on this last month. Drury acknowledged the Rockport officials and Larry Gil, the North Coastal team leader. She reminded the WRC of the issue of EO 181, which was raised last month. She said that a copy of the EO had been sent with the package. Since last month, we have discussed this with DEP NERO. There are two provisions of the EO that could potentially apply, but don't: if state money was used to fund this, the EO would apply, but the project will be totally funded through betterments, so no state money will be involved; also, if any work took place in the velocity zone, as indicated on the Flood Hazard Mitigation Program maps, the EO would apply. All work will be done outside of the velocity zone.

Last month, Staff recommended that the WRC finds this project to be insignificant under the Interbasin Transfer Act. The town is under an ACO with DEP to find a solution to the wastewater problem in the Long Beach area of town. This area is a seasonal summer "resort" owned by the town and leased out. The leases of the area are very strict and only allow occupancy from April to October. The agreement with Gloucester specifies that the City will only accept wastewater from April to October. The town is only sewerage 35,000 gpd from this area during this time period. They are experiencing failing septic systems which are polluting the beaches and shellfish beds, etc. They looked at many alternatives to sewerage to Gloucester, but these were rejected because of environmental concerns or prohibitive cost. Rockport has its own wastewater treatment plant in the northern part of town, but to sewer from the southern part of town, through the rock in Rockport, is prohibitively expensive. The Gloucester wastewater treatment plant is very close to this area. It is an environmentally sound, cost effective solution to this problem. DEP concurs that this is the best alternative. We evaluated this project against the criteria for insignificance in the regulations and it meets all of the applicable criteria. We decided that streamflow analysis was not appropriate here because of the tidal nature of the area.

Drury referred the WRC to a letter in the package from Mr. Barletta of Rockport which discusses growth control. The town owns the land. The lessees cannot alter the buildings without permission from the selectmen and there can be no further development without town meeting approval. Barletta added that there were no more available lots in the area and the agreement with the city of Gloucester would also preclude any further development. Pelczarski asked about the betterments. Barletta said that they would be tied to the lease because the town owns the land but not the cottages. These are owned by the lessee.

Smith suggested that we include in our findings that WRC recommends that Rockport does not allow any more development in this area. This would not be binding, as we cannot condition a determination of insignificance. Drury added that if any new development resulted in increased flows, additional ITA review would be triggered.

Barletta said that there hasn't been a new building in the Long Beach area in over 30 years and the Board of Selectmen would rather see the number of cottages decreasing. There is very little chance of more development happening here. In addition, the conservation commission would not allow it. Tisa asked if are we just talking about new buildings, or does this include new additions, such as more floors. Barletta said that zoning precludes this. Pelczarski asked if Rockport had any policies on post-storm building. Barletta replied that a resident could only replace the existing structure. Veale asked if all homes in the area are being required to hook into the sewer. The response was yes.

Clayton supports the recommendation that the WRC support the present Board of Selectmen in the position that there should be no new or expanded development in this area as a result of this sewerage. This should be the "sense of the Commission" as part of finding this to be insignificant. Smith directed Staff to include this in the decision document. Contreas said that we should add that the town should provide information to the residents about water conservation to minimize the transfer.

V O T E	Rich moved with a second by Veale to approve the Staff recommendation, as amended. Webber stated that as a resident of Rockport, he would abstain.
	The motion passed unanimously by those present, with one abstention.

Agenda Item #3: Vote on Holden's Request for a Determination of Applicability Under the Interbasin Transfer Act

Smith reminded the Commission that there was a presentation on this last month. At that time, we stated that we would not require the town to be present this month, if that would be a hardship for them. However, Smith had a call from Al Berg, from the town of Holden, who said that he was ill, otherwise he would have attended because this is a very important project for the town. Drury congratulated the WRC on their grasp of the project's complexities explained last month and again acknowledged the help of Ron Washburn of DEM's legal staff. She referred to the map showing Holden's and Worcester's existing sources. Holden needs to come into compliance with the Safe Drinking Water Act as it applies to Muschopauge Pond. The town has been working on this for years. They share Muschopauge Pond with Rutland and Rutland has

first rights to it. After looking at many alternatives, including treating the pond, they have decided that the best alternative would be to discontinue use of the Pond and build a new connection with Worcester. They have worked with us and with DEP in sizing this new connection so that the net interbasin transfer comes out to be zero. They have requested a determination of applicability from the WRC, as this is a bit complicated. Staff recommends that this is not applicable under the ITA however, if Holden increases its connection with Worcester in any way, or if they reactivate Muschopauge Pond, the ITA would apply retroactively.

Zimmerman asked if Holden reactivates use of Muschopauge Pond, would the ITA be triggered automatically. Yes. Is this water skipping any areas where it could be providing instream flow? Drury referred to the map to show Worcester's sources and explained how the Worcester system worked. The water is discharged in different areas of the basins. She was asked if there was any way of determining what these impacts might be and responded that we can't require this under the ITA, if we say it doesn't apply. Drury deferred to DEP and what they might require under the WMA. Smith said there is so much water "sloshing back and forth" already it would be difficult to determine the exact impacts of this transfer, especially since many of Worcester's sources are located in Holden.

Simonson stated that last summer Worcester received water from MWRA on an emergency basis. Holden looked at application to MWRA. In effect, this could cause Worcester to go to the MWRA more often. She wants us to add that the Act is inapplicable if Holden implements a water conservation plan. Smith replied that the MWRA issue should be addressed under MWRA's policies. DEP has Holden under an ACO which will require them to implement a conservation plan. If the Act does not apply, we cannot require Holden to do anything. We can recommend that they implement a water conservation plan only. Giles stated that going through the DEP ACO process would be a more effective tool. Clayton agreed.

Webber stated that this discussion will now be in the minutes, which will be made available to the town so it is important that we support DEP in the ACO. Zimmerman wants someone to look at "all this water sloshing around". Smith stated that Worcester is going through a safe yield analysis with DEP which will speak to this. R. Cohen asked about Poor Farm Brook, which DEP denied: is Holden giving up on this source? Smith thinks this will eliminate the need for Poor Farm Brook. Drury said that if they continue to pursue Poor Farm Brook, in addition to this project, it would be subject to ITA review.

V O T E	Webber moved with a second by Clayton to approve the Staff recommendation that Holden's proposed high service system interconnection with Worcester is not subject to the Interbasin Transfer Act. The motion passed unanimously by those present.
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Gartland asked if Holden was abandoning use of Muschopauge Pond. Both Holden and Rutland are required to report water levels of the Pond to the WRC now. Drury said that they would only use Muschopauge with a "boil water" order during a DEP-declared emergency. Gartland suggested that we could reduce the reporting requirement for Holden.

Agenda Item #4: Presentation on Essex's Request for a Determination of Insignificance Under the Interbasin Transfer Act

Drury acknowledged Essex's representative and Larry Gil. This is another transfer from the North Coastal basin to Massachusetts Coastal basin via the Gloucester wastewater treatment plant. A question was raised about this last month, with respect to cumulative impacts. The North Coastal basin is a "catch-all" basin, comprised of all the coastal drainages of the north shore. As such, the subbasins within the watershed do not interact with each other. They are not connected hydrologically, so a transfer from one should not interfere with or cause impacts to a transfer from another.

The area to be sewered is very limited. The town went through the EIR process to identify these areas. They are under a court judgment to address their wastewater problems. Essex has serious Title 5 problems. They are currently served completely by on-site septic systems. Several alternatives to sending wastewater to Gloucester were investigated. Among them: in-town wastewater disposal through groundwater and surface water discharges and alternative/innovative septic systems. These alternatives were all judged unacceptable, mainly due to environmental problems related to soils, the Ocean Sanctuaries Act, and the ACEC program. The town will only sewer this limited area. They are limited in the amount of wastewater they can transfer by the size of connection and their agreement with Gloucester. Gloucester will only accept 0.225 mgd (225,000 gpd).

This project was reviewed by DEM, DMF, DEP and by the North Coastal Watershed Team leader. All agreed that this was the best way to address environmental problems and pollution to the waterways and the important shellfish beds in Essex Bay. Rusty Iwanowicz, DMF, in his review stated that the improvement in water quality would far outweigh the impacts to water quantity from this transfer.

This project meets all the applicable criteria for insignificance under the ITA, therefore **staff is recommending that the WRC find this to be insignificant under the Act.** Staff looked at the cumulative impacts because in the area around Chebacco Lake, which will be sewered, the towns of Essex and Manchester-by-the-Sea both have water supply sources. Manchester-by-the-Sea takes the most water from this subbasin. It stays within the basin, but not subbasin. The amount that will be sewered from this area is very small compared to this. Cumulatively, the sewer project is not a big deal, but the Manchester-by-the-Sea withdrawal is of concern. Essex shares these concerns and that's why they are limiting the amount of area that can be sewered.

Gartland stated that the sewered area was broken into six subbasins, which all flow into the tidal portion of the Essex River. Most of the water to be sewered from these areas is very small. These streams are very small; most have about zero flow during 7Q10 conditions. The water to be sewered in most of these areas is actually coming from another subbasin so this was not too big a concern. As mentioned, we are concerned about the water leaving the Chebacco Lake subbasin, but the most of the water leaving this subbasin is going to Manchester-by-the-Sea. The amount that will be sewered is actually incrementally very small relative to Manchester-by-the-Sea's withdrawals (0.07 mgd, as opposed to 0.88 mgd to Manchester-by-the-Sea). Based on the comments that quality is such a major concern, and this sewered amount is so small, staff determined that these concerns override any concerns about loss of water to the subbasins. The

town was looking at a lot more area to be sewerred, but through the EIR process, they narrowed it down to just these critical areas.

Zimmerman asked why in-ground, in-town alternatives fell out. Clay and wetland soils were a problem and DEP said it would not allow these types of systems to be permitted in these areas, because of the soils. Contreas asked about the length of the agreement with Gloucester. Whalen replied that the agreement was for 25 years. In order to expand the sewerred area, it would require a 2/3 vote of Essex town meeting and approvals by the City of Gloucester and DEP. Contreas asked if this opened up areas for sewerred in Gloucester. Whalen replied that Gloucester issued a temporary moratorium on sewerred in the areas near the border with Essex. Drury stated that this was addressed in the EIR, but because Gloucester is not subject to the Interbasin Transfer Act for any sewerred related to this project, we did not focus on it. Drury will furnish the information to Contreas.

Clayton stated that a number of small streams are habitat for a variety of anadromous fish. Some of these streams go dry in summer. Did the agency staff look at this? Drury answered that DMF was specifically asked about this issue. They said that the pollution problem was more severe than flow problems and needed to be cleaned up.

Zimmerman stated that when the sewer pipes start to leak, they will carry more flow. Drury replied that Essex had a few things in place to prevent excessive I/I. The town will be implementing an I/I reduction program. They are also subject to penalties if flow exceeds 225,000 gpd. The size of the connection will also prevent this. If the pipes are carrying excessive I/I, there will be overflows in Essex. Whalen stated that the proposed Essex system will be a force main system with five pump stations on a SCADA system, which will report all flows on a daily basis to the central DPW. We are also installing water meters that can be read remotely. We will be doing this monthly so we can compare pump station flows to actual water use. This will help us determine where I/I needs to be looked at and repaired.

Thibedeau stated that several years ago, DEM and other agencies did an extensive study of Chebacco Lake in conjunction with Salem State College, because residents of the town were concerned about aquatic vegetation growth in the lake. We recognized that the primary cause was the failing on-site septic systems around the lake and we recommended that Essex sewer the area. This recommendation was made after an exhaustive study of alternatives which ruled out the use of alternative/innovative septic systems.

Smith said that we will ask for a vote on this in January. The town has an end of the year deadline related to their use of state funds for this project, but this deadline has been delayed until they get final approval from us. After hearing today's discussion, Smith's sense is that this should not be a problem for the town.

Agenda Item #5: Vote on the Interim Definition of Stressed Basins

Smith reminded the WRC that they were going to vote on this last month, but were asked to wait by the MA Instream Flow group, so they could get us comments to consider. We did receive extensive comments from them and we made some changes based on these, but the changes do not significantly change the underlying analysis so we are comfortable recommending that the interim definition be approved at today's meeting.

Gartland said that we sent out a red-line/strike-out version under separate cover and included the Instream Flow group's comments. She went over the changes made from last month: the section on how this will be used by the various state agencies has been updated and the methods used have been clarified. We hope that the second methodology will be applied as projects are proposed in smaller subbasins. The Jones River basin is no longer classified, pending further study.

Smith stated that he received a memo from DEP outlining how the report would be used under its various programs. WSCAC suggested that MEPA might use stressed basin report as they develop EIR scopes for projects.

The WRC congratulated Staff on the report. Tisa stated that he looked forward to incorporating the target fish work into definition of stressed basin. DFW will be making a presentation on this at the January WRC meeting. Simonson also offered congratulations, but stated that she also endorses the Instream Flow group's work. More volunteers should be used to do the type of work that the state isn't able to do. Russ Cohen stated that the areas where there is no flow data are areas where we could focus work. He stated that a streamflow based methodology couldn't gage stress to non-flowing water habitats, including coastal kettle ponds, wetlands and vernal pools. There are habitats where the presence of water is important and flow data do not indicate if they are stressed or not. So this work needs to be done. He suggested that the use of the report by state agencies should also include policy and planning. What can we do to get basins off the stressed basin list? Is the stressed basin definition going to be used in the SRF process?

V O T E	Zimmerman moved with a second by Webber to adopt and approve the Interim definition of stressed basins as provided in the December 4, 2001 memo from Vicki Gartland to the WRC.
	The motion passed unanimously by those present.

Agenda Item #6: Vote On The Revised DEP Regulations On Industrial Holding Tanks

Smith stated that we had a presentation on the draft regulations before they went out for public comment. Reinhardt went over the changes to the regulations. The regulations deal with holding tanks, not with discharges. This wastewater will be hauled off site in areas where ground water and surface water needs protection. It also allows DEP to track shipments from facilities. These regulations take a 16-year old policy and codifies it into regulations. They also provide for a one-time certification, simplify things and make things more explicit, so the regulated community can understand what's expected. The regulations cover a wide spectrum of types of holding tanks.

These regulations have a one-time certification for tanks and no certification for containers. They require secondary containment for in-ground tanks. There are specific criteria to determine where sewer is easily available. This attracted the most comments. Other comments concerned that the regulations as proposed did not allow the use of holding tanks in sewered areas, so we changed them to explain the circumstances where they could be. A wastewater treatment plant which primarily treats sanitary wastewater may not be equipped to treat industrial waste. The

changes are not meant to shift pollutants from one area to another, but to allow the pollutants to go to a facility that is equipped to treat industrial waste. Other than this nothing has changed from the draft we presented to the WRC in September. The regulations should be finalized early next year. DEP needs WRC approval to finalize them. Reinhardt asked for provisional approval, so that he can move forward on finalizing this.

Smith told Reinhardt that the WRC does not give provisional approvals, but we can give a sense of the Commission. We will be ready to approve the regulations once DEP's Commissioner has approved them.

Agenda Item #7: Presentation and Discussion of the WRC 2002 Workplan

Smith went over our accomplishments from this past year:

- Stressed basins
- Lawn and landscape policy and guidance
- Lake and ponds strategy (this wasn't on our workplan, but was an initiative by the Secretary and used a lot of the same staff)
- Water need forecasting policy
- A policy for guidance for cost and rate comparison, to be used in the Interbasin transfer program
- A policy on third party standing under ITA.

We have an internal draft of the revised ITA regulations and guidance. The guidance will be put forward based on the existing regulations, then we will consider if we are going to update the regulations. The Drought Management Plan is almost completed. The Hydrologic Conditions reports are a huge undertaking. We didn't do anything with biological conservation, but we will be looking at the new bio-map to see if that has uses for us. We talked about updating the water supply policy statement in March, but this should be related to next year's work plan. We have also reviewed many involved Interbasin Transfer applications (including Mansfield and Foxborough).

The work plan for 2002 includes:

- The Water Assets Project. We want to do state-wide water supply assessment and determine where we can find environmentally sound sources of water supply. We should concentrate on this.
- Outdoor water use. We need to finalize the guidance and policy and do outreach and education and follow-up on the recommendations.
- IBT Guidebook update and regulation revision. We hope to move forward on this. This will be a major undertaking.
- Stressed Basin Report. We will have presentations on the target fish approach and the USGS Ipswich River habitat work.
- Drought Management Plan. We have to finalize the plan.
- MWRA expansion plan. Any new community added to the system is by definition an interbasin transfer. We will follow this and provide updates to the WRC.

Clayton suggested that we prioritize these and add a time line showing when they might be completed.

Simonson stated that the water assets project should include water waste as a ground water resource as well as look at unaccounted-for water and should also look at seasonal peak demands. She said the project should answer the question “What do we need to do to behave in a manner consistent with the available resources?”. Pelczarski asked if we could consider the ocean as part of our water assets, in light of Bluestone project. Smith said that this project is going to frame the questions, rather than answer them. Zimmerman stated that somehow habitat has to be linked with this, so that we don’t identify assets as only for human use.

Meeting adjourned

Minutes approved 12/11/03